



OBJECT POSITION DETECTOR**Patent number:** WO9607981**Publication date:** 1996-03-14**Inventor:** ALLEN TIMOTHY P (US); GILLESPIE DAVID (US);
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STEINBACH GUNTER (US)**Classification:****- International:** G06K11/16**- european:** G06F3/033D2G, G06F3/033Z4S2**Application number:** WO1995US11180 19950901**Priority number(s):** US19940300387 19940902**Also published as:** EP0777888 (A1) EP0777888 (B1)**Cited documents:** US5374787 EP0609021 EP0574213**Abstract of WO9607981**

A proximity sensor system includes a sensor matrix array having a characteristic capacitance on horizontal and vertical conductors connected to sensor pads. The capacitance changes as a function of the proximity of an object or objects to the sensor matrix. The change in capacitance of each node in both the X and Y directions of the matrix due to the approach of an object is converted to a set of voltages in the X and Y directions. These voltages are processed by digital circuitry to develop electrical signals representative of the centroid of the profile of the object, i.e., its position in the X and Y dimensions. Noise reduction and background level setting techniques inherently available in the architecture are employed.

